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"Everybody with Me?" and Other Not-so-useful Questions

"ANY QUESTIONS?" "Is everybody with me?" "Does this make sense?" I have asked my students these vague types of questions many times and the most common response was...silence. But how should I interpret the silence? Perhaps the students understand everything completely and therefore have no questions. Maybe they have questions but are afraid to ask them out of fear of looking stupid. Or it could mean that they are so lost they don't even know what to ask! Only our boldest students would say; "Um, you lost me 10 minutes ago, can you repeat the whole thing again?"

Another problem with vague prompts is that people, especially students, often suffer from "overconfidence bias." They believe they understand something when someone explains it and don't realize the limits of their understanding until faced with a specific problem or question that requires them to apply their learning. In fact, there is some evidence that college students who understand the material the least are the most prone to overrate their competence. This is referred to as the Dunning-Kruger effect (Kruger and Dunning, 1999). Unfortunately, students are not the only people vulnerable to overconfidence bias. Kearney and Sheffer (2015) write about the overconfident professor, stating; "When one student answers a question correctly in class, we move on, believing that if one person provided a correct answer, then they must all be 'getting it'."

Vague prompts also can unintentionally signal to students that we secretly hope they don't have questions because we want to move on. Many years ago, I observed a faculty member (who was otherwise a great teacher) ask her class, "Do you have any questions?" while at the same time closing her book and taking out the handout for the next activity. Not surprisingly, no one had questions. When I mentioned this to her after class, she was unaware of the signal her actions may have sent and appreciated the feedback, which shows the value of teachers

observing each other, but I digress.

An alternative: Classroom Assessment Techniques

The best alternative to the vague "any questions?" prompt is to use a brief Classroom Assessment Technique or CAT (Angelo and Cross, 1993). CATs do not need to be elaborate or require extensive preparation or class time.

For example, the muddiest point exercise simply asks students to write for a few minutes about what they consider to be most confusing or unclear aspects of the concept being explored. The authors describe this as "just about the simplest Classroom Assessment Technique imaginable" and that "it provides a high information return for very low investment of time and energy." (p. 154) This simple exercise has many benefits:

- Unlike the prompt, "Any questions?," which may signal that the teacher hopes that there are no questions so he can move on, the muddiest point exercise signals that confusion is a normal and expected part of the learning process.
- Because the students are writing privately, there is less stigma than raising one's hand.
- The teacher gets a more complete picture of student learning than one or two students raising their hands.

A high return, indeed, for an investment of about five minutes of class time!

Other examples of CATs include: directed paraphrasing, where students restate in their own words the main points of a lesson; and a pros and cons grid, which asks students to analyze the costs and benefits or advantages or disadvantages of two choices. Angelo and Cross (1993) give examples of how to use a pros and cons grid in a variety of courses including evaluating two possible designs

in an engineering course or confronting an ethical dilemma in an anthropology course.

Angelo and Cross's book lists 50 CATs along with implementation tips and guidelines for when to use the various CATs. For example, some CATs are designed to assess content knowledge, while others can assess higher-order skills, such as analysis and application, and still others are useful in assessing affective constructs, such as attitudes, values, and self-awareness.

Using CATs in your teaching

If your college or university has a teaching center, it is a good bet that they have Angelo and Cross's book, *Classroom Assessment Techniques: A Handbook for College Teachers*. Also, the teaching centers at Carnegie-Mellon University and George Washington University have created concise online guides on CATs, which I've linked to in references below.

So, if you are looking for a practical way to improve your teaching, start using CATs

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Spring Break - March 5-9
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Remembering vs. Understanding

I DON'T TEACH HISTORY, but I've always been a bit of a history and trivia buff. So, just for fun, I recently decided I wanted to memorize all the U.S. presidents in order. For the early presidents, I use a mnemonic that I learned in elementary school: "*Washington And Jefferson Made Many A Joke*" which refers to Washington, Adams, Jefferson, Madison, Monroe, Adams, Jackson.

Although handy, this approach has limitations. Generally, a mnemonic takes something random, such as a list of names, and imposes a structure that makes it easier to remember. The main problem with this mnemonic is that it focuses on the surface structure (the first letter of the last name) and so it tells me nothing useful about these historical figures. Was John Quincy Adams a good president? What were his major accomplishments? What was his legacy?

Mnemonics can be useful when it is necessary to memorize arbitrary information such as names, dates, anatomical terms, geographical features, and formulas. (Willingham, 2009) But the use of mnemonics is often a sign that learning is shallow or superficial.

In contrast to my reliance on a mnemonic to remember our early-American presidents, I can name the 20th century U.S. presidents without such an aid. Why? Because 20th century U.S. history is my favorite era. In addition to studying it in school, I have read books and watched films that depict historical events of the 20th century. As the cognitive psychologist Daniel Willingham

says: "Memory is the residue of thought." In other words, we remember that which we think about. The more deeply we think about it and the more emotions it evokes, the more likely we are to remember it. (Immordino-Yang, 2015) For each of the 20th century presidents, I have "rich associations." For example, when I think of Lyndon Johnson, I think of Vietnam, Civil Rights, the War on Poverty, and other events that dominated his presidency. This is much deeper and richer than a mnemonic. It is almost inconceivable that I could "forget" when LBJ was president or that I could confuse him with another president. I could also probably transfer my knowledge of LBJ to another context, such as comparing him to other leaders.

So, I have the first eight presidents covered with my elementary school mnemonic. I know their names, but little about them. For the 20th century presidents, my knowledge is richer and deeper. However, I have never been able to remember all the 19th century presidents or put them in order. James Polk? Chester Arthur? No associations, nothing, zip, zilch, nada.

If I want to memorize all 45 presidents in order, I have a choice. I can use a mnemonic or other memorization strategy, such as a memory palace or method of loci. With some practice, I would then be able to perform my parlor trick. But what would this really accomplish? Would I understand 19th-century U.S. history any better than I do now?

A better, although more time-consuming,

idea would be to actually study 19th-century U.S. history or at least learn a few things about each of the presidents. Perhaps I could write a haiku about each 19th century president or create a campaign poster for them. Those types of tasks would require thinking about each one in a deeper way and would create associational hooks for each president.

Implications for the classroom

If it is necessary for students to memorize certain information in your course, then have them use a mnemonic. It will make the process more efficient. But also consider why they are memorizing the information. Will they use it later in some way that involves higher-order thinking?

If you want students to truly understand something and be able to apply it and transfer it to new contexts, then focus on getting your students to think deeply about the underlying concepts. Wiggins and McTighe (2006) refer to this as "teaching for understanding." If you can get them to feel as well as think, that will make it even more likely to stick. (Immordino-Yang, 2016)

Now, does anybody have a recommendation for a good book on the Fillmore administration?

References

Immordino-Yang, M. H. (2016) *Emotions, Learning and the Brain: Exploring the Educational Implications of Affective Neuroscience*. New York: W.W. Norton and Company Inc.

Wiggins, G. & McTighe, J. (2006) *Understanding by Design*, Expanded 2nd Edition. Upper Saddle River, N.J.: Pearson Education, Inc.

Willingham, D. T. (2010), *Why Don't Students Like School?: A Cognitive Scientist Answers Questions About How the Mind Works and What It Means for the Classroom*. San Francisco: Jossey-Bass. (see especially chapter 4– Why Do Students Remember Everything That's on Television and Forget Everything I Say?)

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Pete Watkins; Remembering vs. Understanding: Faculty Focus; March 3, 2017 [<https://www.facultyfocus.com/articles/teaching-and-learning/remembering-vs-understanding/>] February 27, 2018.

CATs

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on a regular basis. Any questions?

References

Angelo, T., & Cross, K. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed., The Jossey-Bass higher and adult education series). San Francisco: Jossey-Bass.

Using Classroom Assessment Techniques [web page] Retrieved from <https://www.cmu.edu/teaching/assessment/assesslearning/CATs.html>.

Classroom Assessment Techniques (CATs): A Guide for Faculty and Teaching Assistants [web page] Retrieved from: <https://library.gwu.edu/utlc/teaching/classroom-assessment-techniques-cats>

Kruger, J. & Dunning, D. (1999) Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*. Vol 77(6), Dec, 1999. pp. 1121-1134. <http://dx.doi.org/10.1037/0022-3514.77.6.1121>

Kearney, E. & Shefer, S. (2015) The Overconfident Professor: "I Know I Taught You Better Than That!". *The Teaching Professor*. Vol 29(2). February 2015.

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Pete Watkins; "Everybody with Me?" and Other Not-so-useful Questions; Faculty Focus; February 26, 2018 [<https://www.facultyfocus.com/articles/teaching-and-learning/bad-questions-prompts/>] February 27, 2018.